

FIG.1

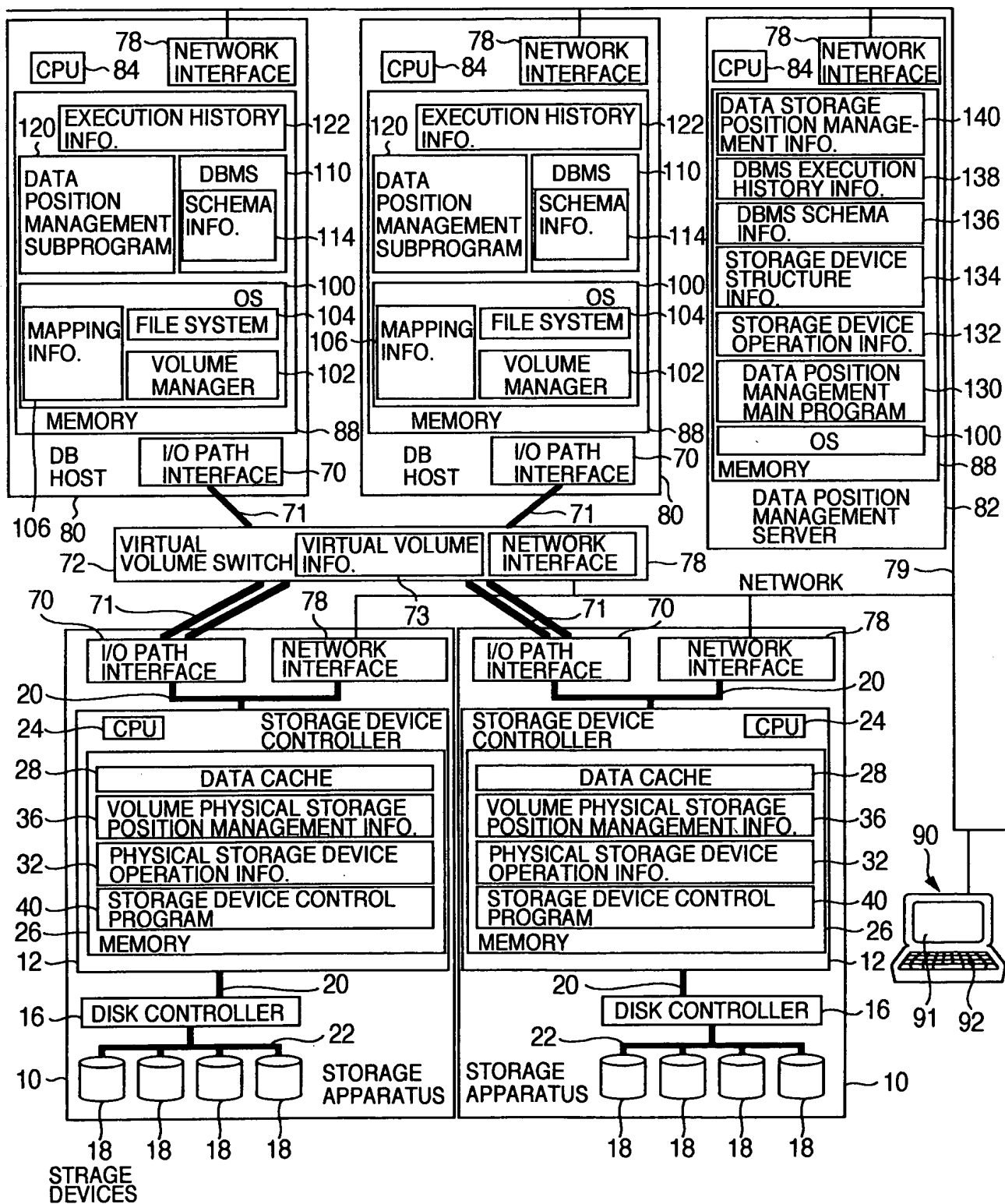


FIG.2

501 VOLUME NAME	502 PHYSICAL STORAGE DEVICE NAME	503 CUMULATIVE OPERATION TIME
Vol0-0	Pdisk0-0	23417390
	Pdisk0-1	38902849
Vol0-1	Pdisk0-0	8290181
	Pdisk0-1	13908202

32

PHYSICAL STORAGE DEVICE OPERATION INFO.

FIG.3

501 VOLUM NAME	512 VOLUME LOGICAL BLOCK NUMBER	502 PHYSICAL STORAGE DEVICE NAME	514 PHYSICAL BLOCK NUMBER
Vol0-0	0-10239	Pdisk0-0	0-10239
	10240-20479	Pdisk0-1	0-10239
Vol0-1	0-10239	Pdisk0-0	10240-20479
	10240-20479	Pdisk0-1	10240-20479
⋮	⋮	⋮	⋮
Empty		Pdisk0-0	40960-122880
		Pdisk0-1	40960-122880

510

515

VOLUME PHYSICAL STORAGE POSITION MAIN INFO.

501 VOLUME NAME	782 MIGRATION LOGICAL BLOCK NUMBER	783 MIGRATION DESTINATION PHYSICAL STORAGE DEVICE NAME	784 MIGRATION DESTINATION PHYSICAL BLOCK NUMBER	785 DIFFERENCE MANAGEMENT INFO.	786 COPY POINTER
Vol0-1	8192-10239	Pdisk0-1	38912-40559	0 1 ... 0	9840
Vol0-2	0-8191	Pdisk0-1	30720-38911	0 0 ... 1	1792
⋮	⋮	⋮	⋮	⋮	⋮

511

36

VOLUME DATA MIGRATION MANAGEMENT INFO.

VOLUME PHYSICAL STORAGE POSITION MANAGEMENT INFO.

FIG.4

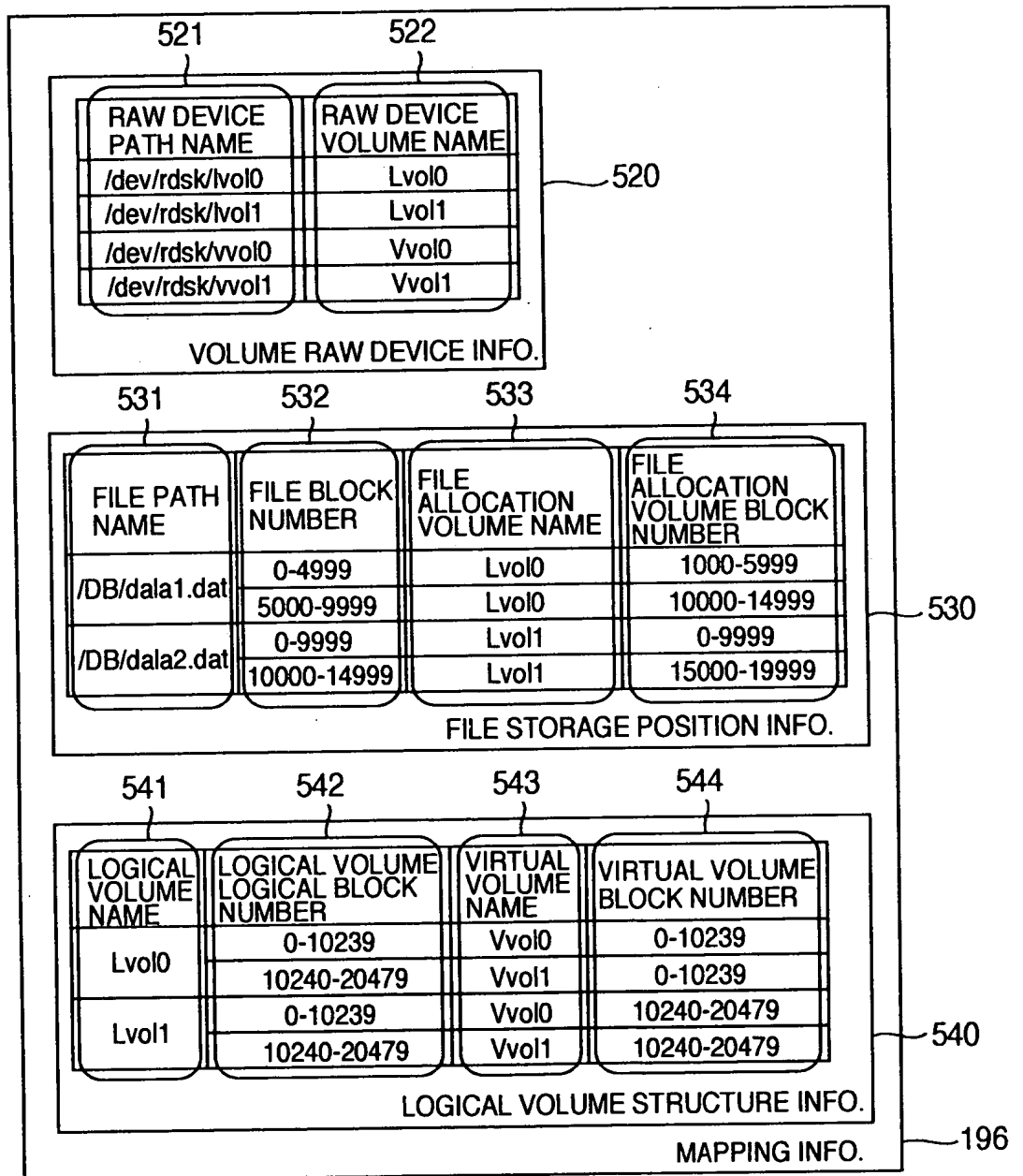


FIG.5

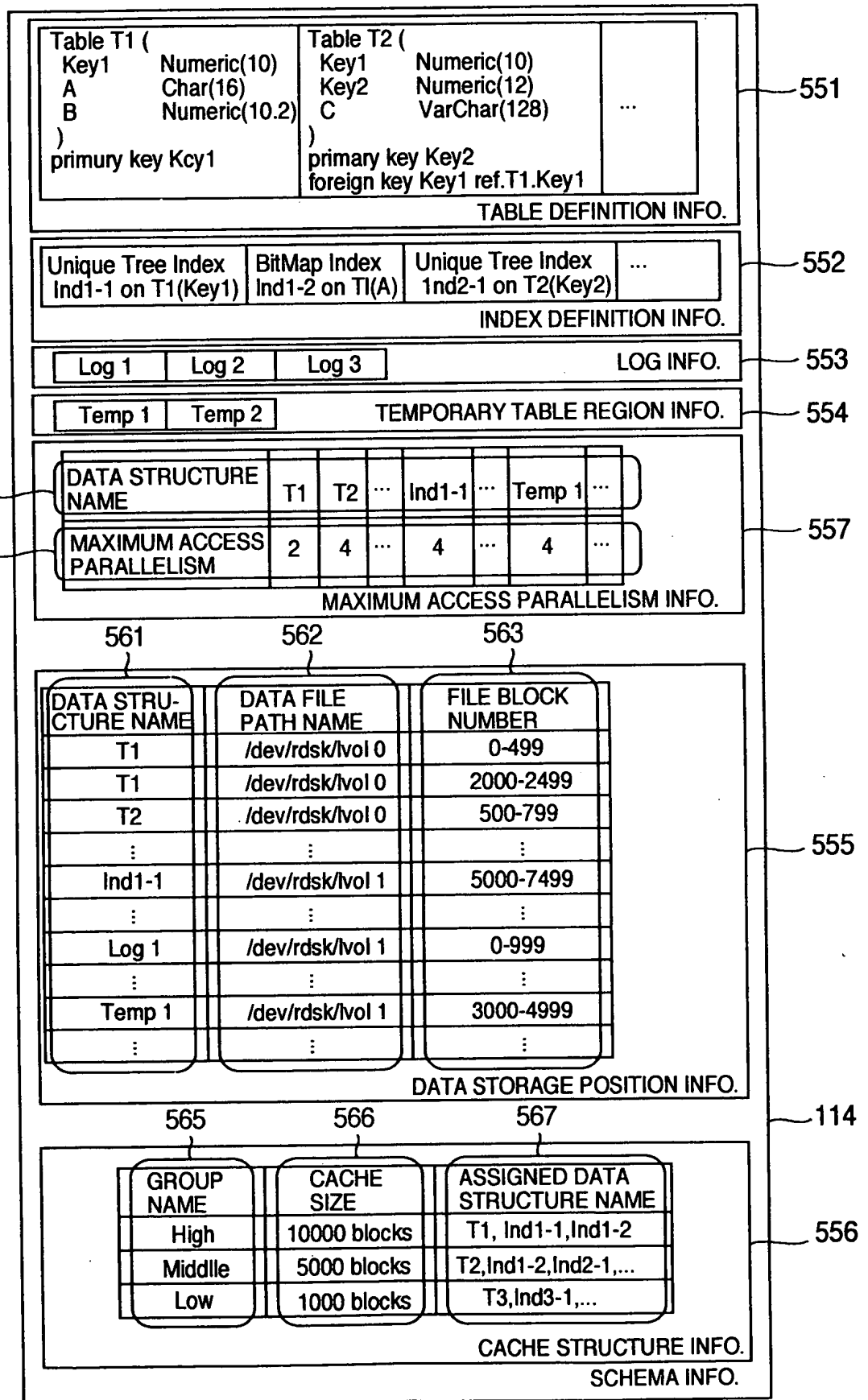


FIG.6

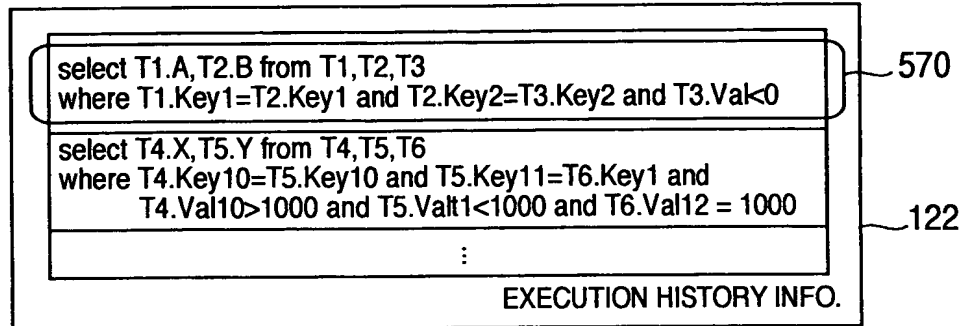


FIG.7

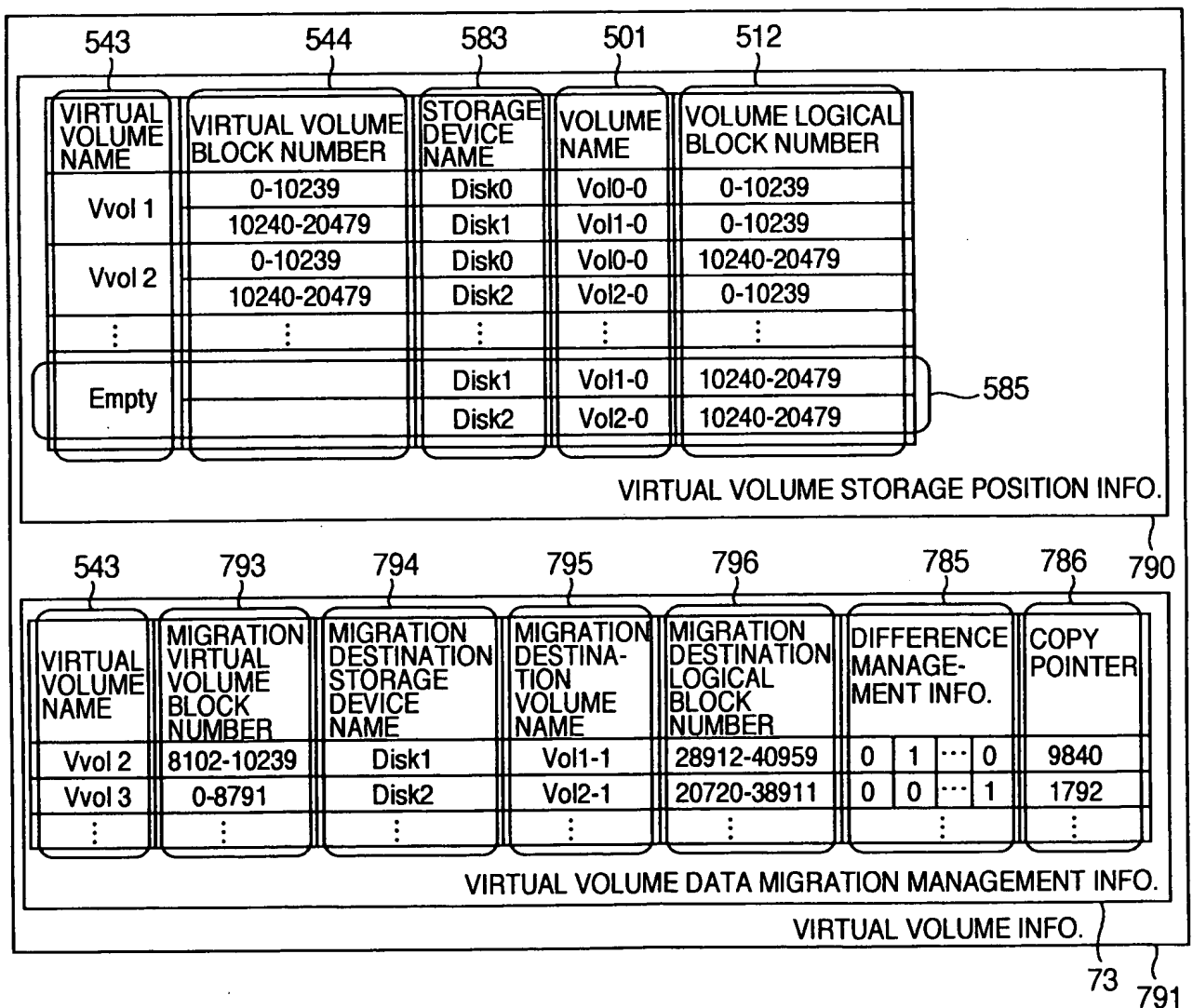


FIG.8

STORAGE DEVICE NAME		Disk0	Disk0	Disk0	...	Disk2	...	583	
VOLUME NAME		Vol0-0	Vol0-0	Vol0-1	...	Vol2-0	...	501	
PHYSICAL STORAGE DEVICE NAME		Pdisk0-0	Pdisk0-1	Vdisk0-0	...	Pdisk2-0	...	502	
OLD CUMULATIVE OPERATION TIME		23917390	38902849	8012891	...	128928479	...	503	
OPERATION RATE	2000/4/1 12:00~ 2000/4/1 12:15	20%	12%	4%	...	50%	...	594	
	2000/4/1 12:15~ 2000/4/1 12:30	15%	10%	7%	...	40%	...		
	2000/4/1 12:30~ 2000/4/1 12:45	16%	9%	5%	...	43%	...		
	⋮	⋮	⋮	⋮	⋮	⋮	⋮		
	⋮	⋮	⋮	⋮	⋮	⋮	⋮		
PREVIOUS CUMULATIVE OPERATION TIME ACQUISITION TIME		595					STORAGE DEVICE OPERATION INFO.		132

FIG.9

583	601	602	603
STORAGE DEVICE NAME	MIGRATION FUNCTION INFO.	DATA CACHE CAPACITY	STORAGE DEVICE VOLUME PHYSICAL STORAGE POSITION MANAGEMENT INFO.
Disk0		4096MS	VOLUME PHYSICAL STORAGE POSITION MAIN INFO. 510 IN DISK0
Disk1			STORAGE POSITION INFO. ACCORDING TO KNOWN RULE
⋮	⋮	⋮	⋮
STORAGE DEVICE STRUCTURE INFO.			

FIG.10

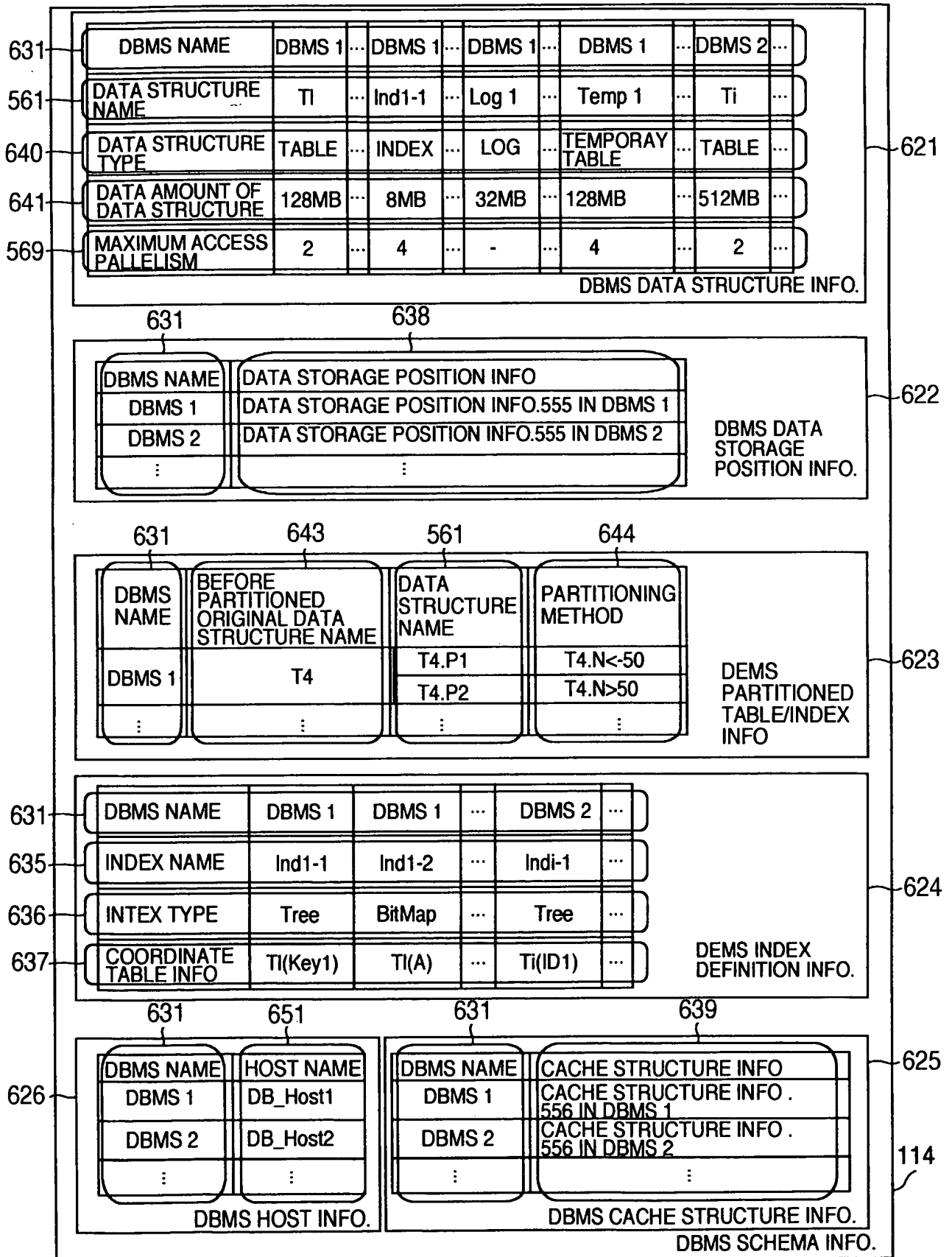


FIG.11

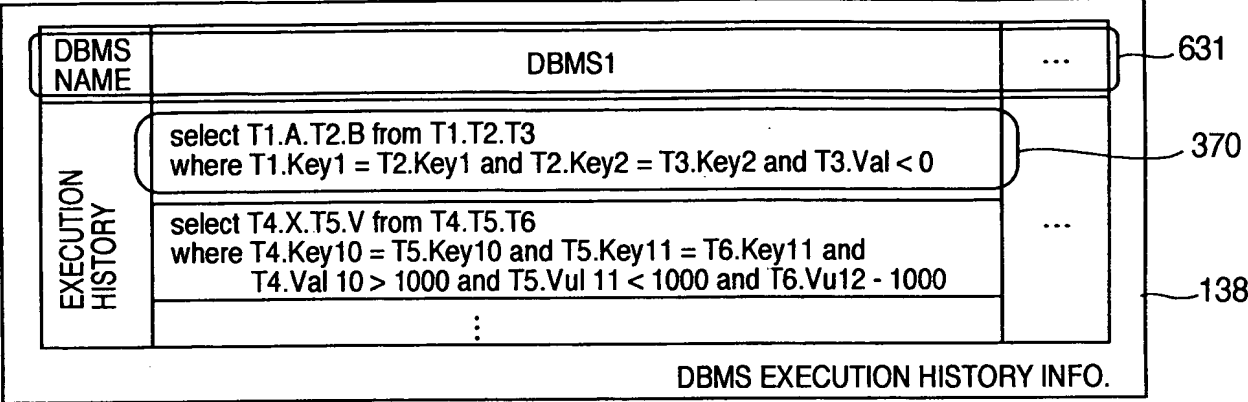


FIG.12

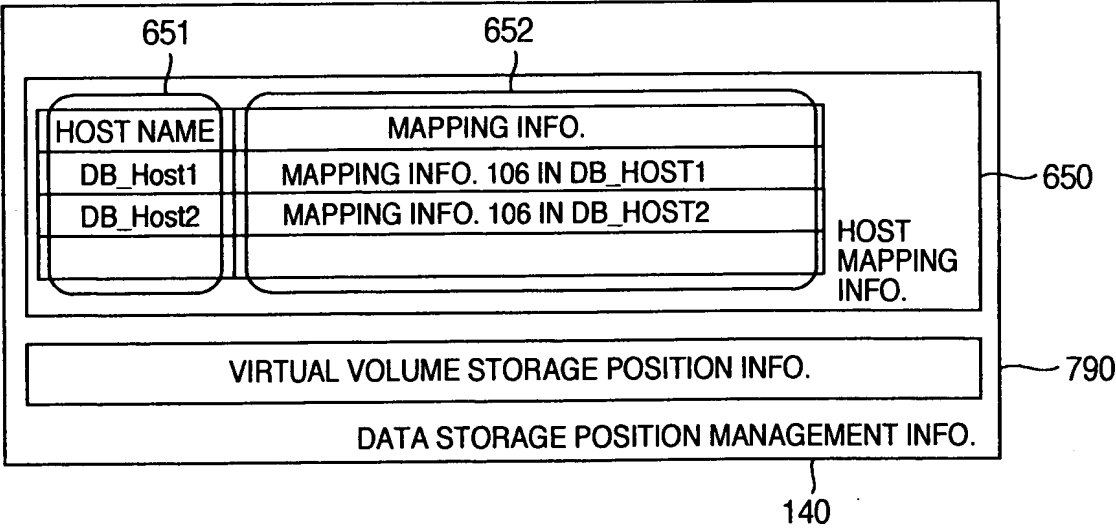


FIG.13

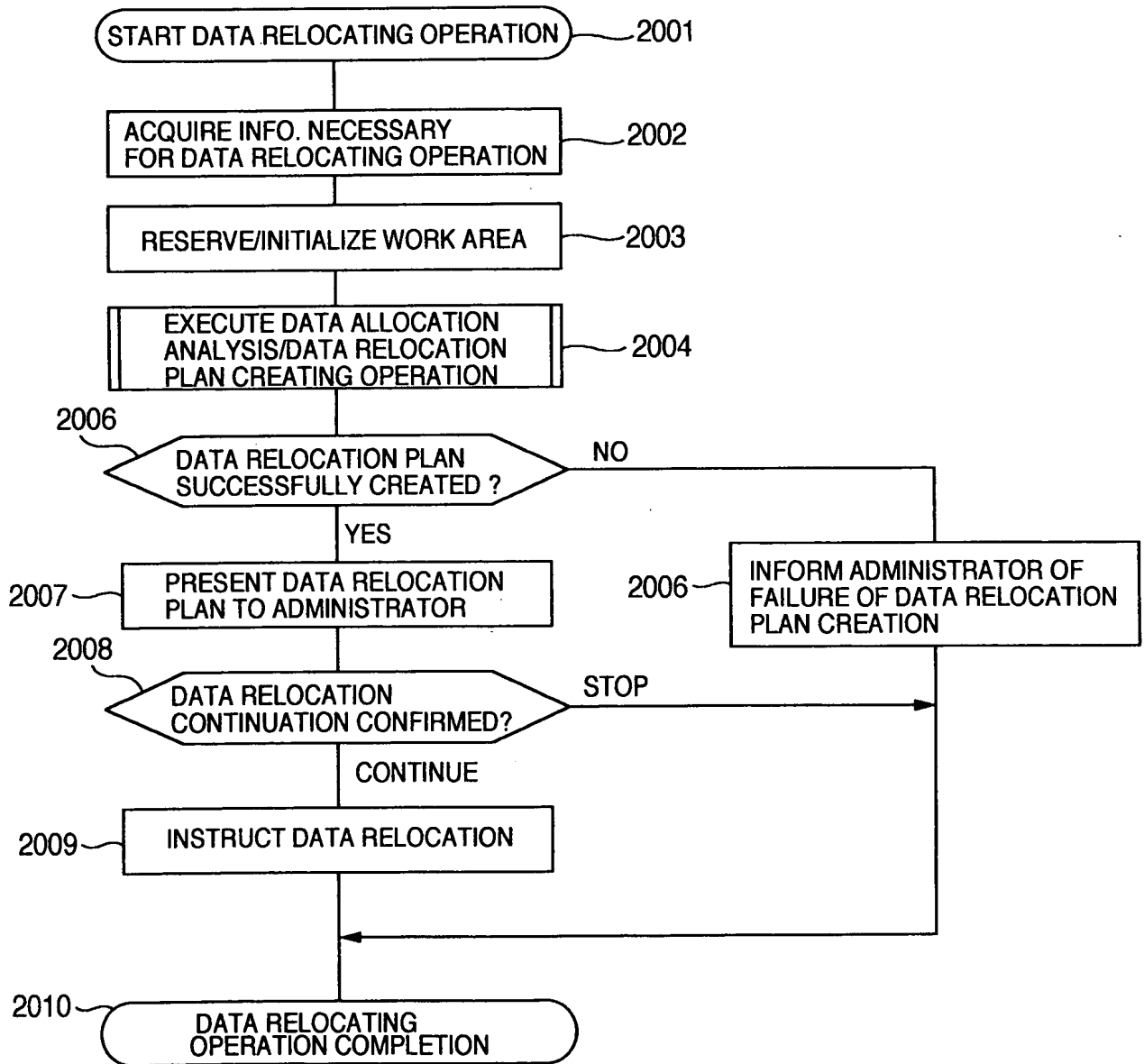


FIG.14

91

911

DATA RELOCATION PLAN CREATING OPERATION HAS BEEN COMPLETED SUCCESSFULLY
TWO DATA RELOCATION PLANS HAVE BEEN CREATED.

912

CREATED DATA RELOCATION PLANS

Migration target 1 : DBMS 1, Table 1,
IN VOL 1-1 ON STORAGE DEVICE : Pdisk 1-3 ⇒ Pdisk 1-2

Migration target 2 : DBMS 2, Table B,
IN VVOL2 ON VIRTUAL SWITCH : Vol 2-2, Pdisk 2-2 ⇒ Vol 1-3, Pdisk 1-4

913

DETAILS
DISPLAY

914

WOULD YOU LIKE TO CONTINUE ?

915

YES

916

NO

Detailed description: The image shows a graphical user interface (GUI) for a data relocation operation. The main window, labeled 91, contains several sections. The top section, labeled 911, is a message box stating 'DATA RELOCATION PLAN CREATING OPERATION HAS BEEN COMPLETED SUCCESSFULLY' and 'TWO DATA RELOCATION PLANS HAVE BEEN CREATED.' Below this is a section labeled 912 titled 'CREATED DATA RELOCATION PLANS'. It lists two migration targets. The first target is 'DBMS 1, Table 1' in 'VOL 1-1 ON STORAGE DEVICE', with a migration path from 'Pdisk 1-3' to 'Pdisk 1-2'. The second target is 'DBMS 2, Table B' in 'VVOL2 ON VIRTUAL SWITCH', with a migration path from 'Vol 2-2, Pdisk 2-2' to 'Vol 1-3, Pdisk 1-4'. To the right of the list is a vertical scrollbar. Below the list is a button labeled 913, 'DETAILS DISPLAY'. At the bottom of the window is a section labeled 914 with the question 'WOULD YOU LIKE TO CONTINUE ?'. Below this question are two buttons: 'YES' (labeled 915) and 'NO' (labeled 916).

FIG.15

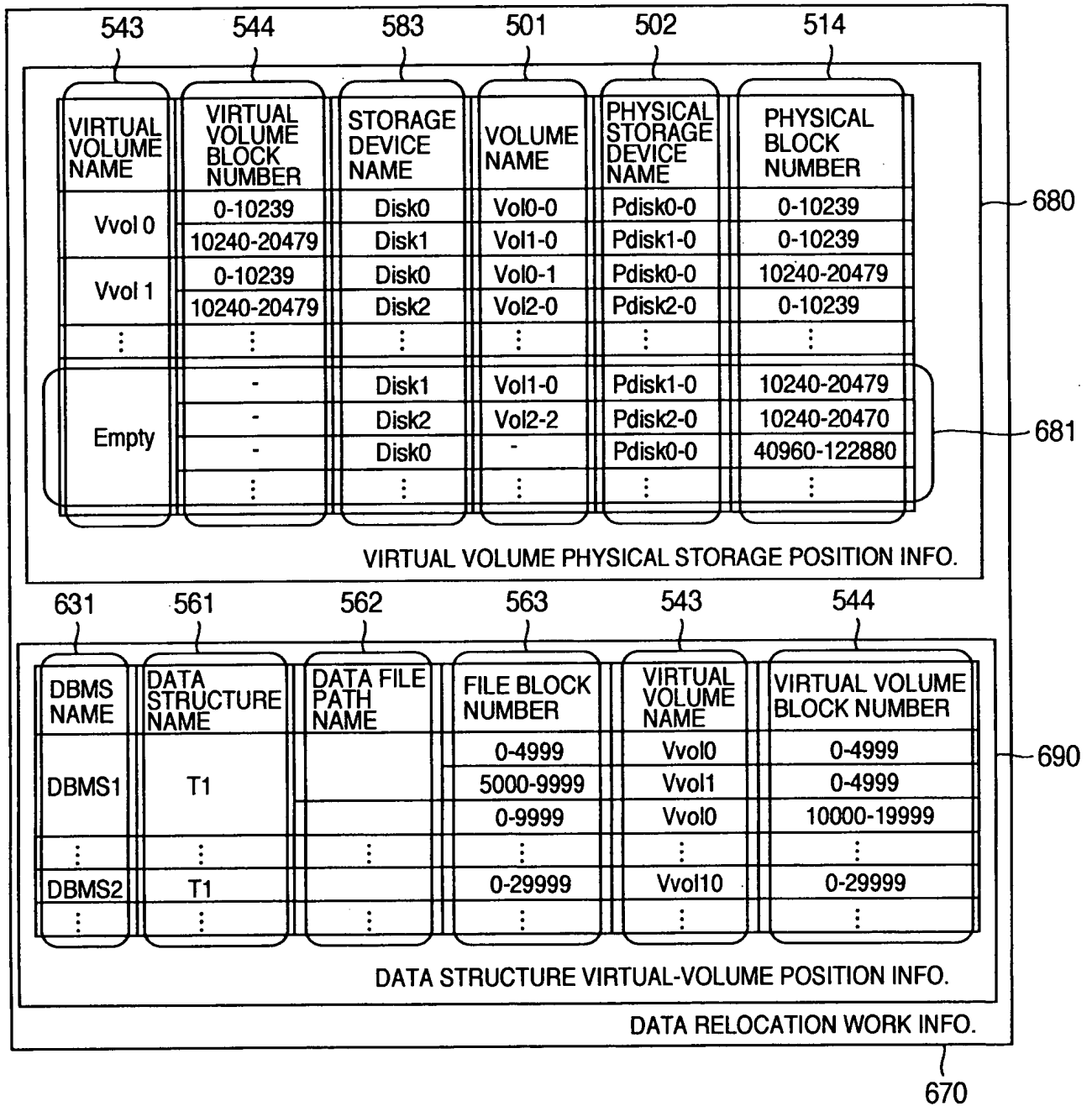


FIG.16

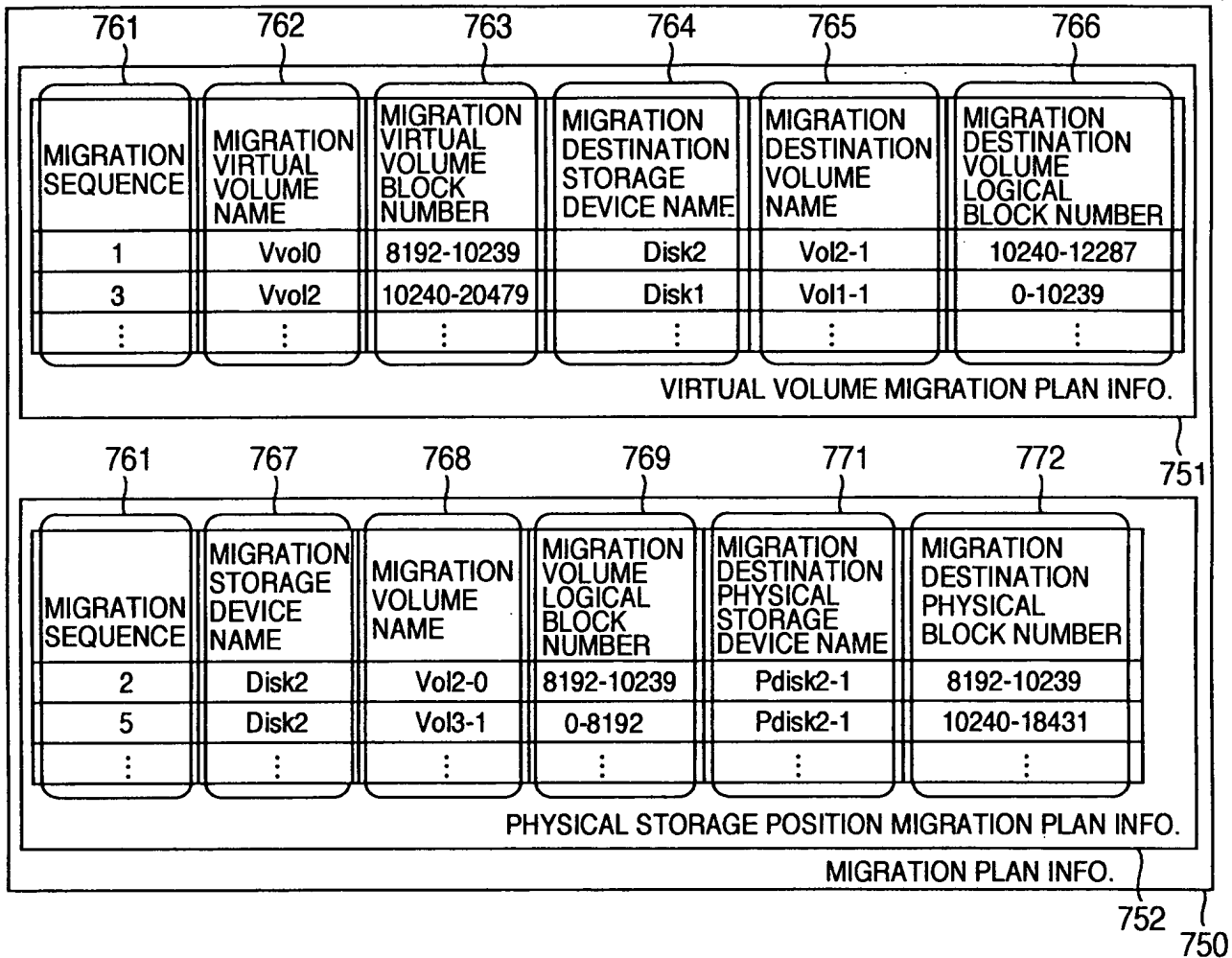


FIG.17

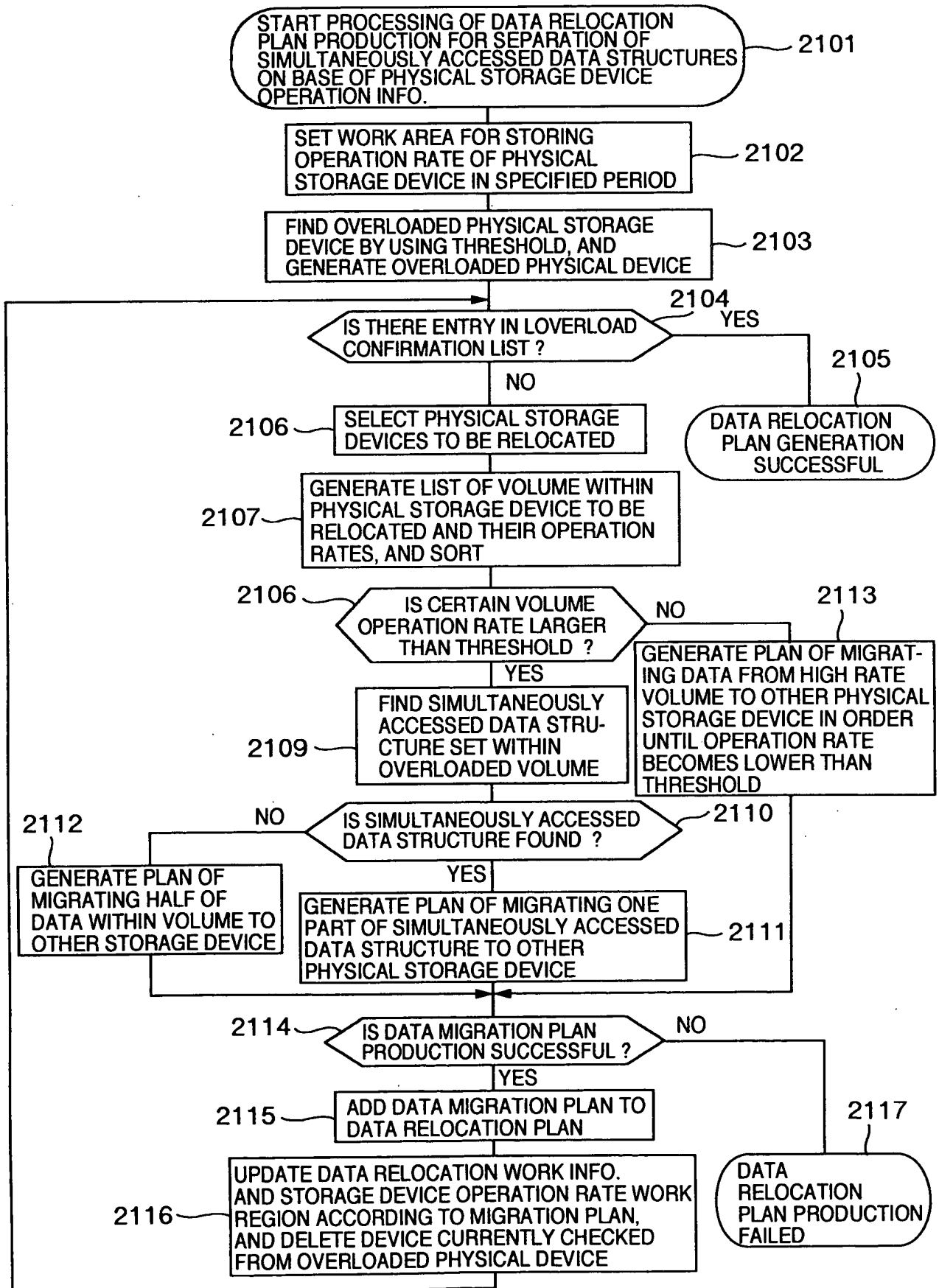


FIG.18

631 DBMS NAME	701 DATA STRUCTURE NAME A	702 DATA STRUCTURE NAME B	703 COUNT VALUE
DBMS1	T1	Ind1-1	2789
⋮	⋮	⋮	⋮
DBMS2	Ti	Ind i-1	829
⋮	⋮	⋮	⋮

700

QUERY EXECUTION SIMULTANEOUS ACCESS DATA COUNT INFO.

FIG.19

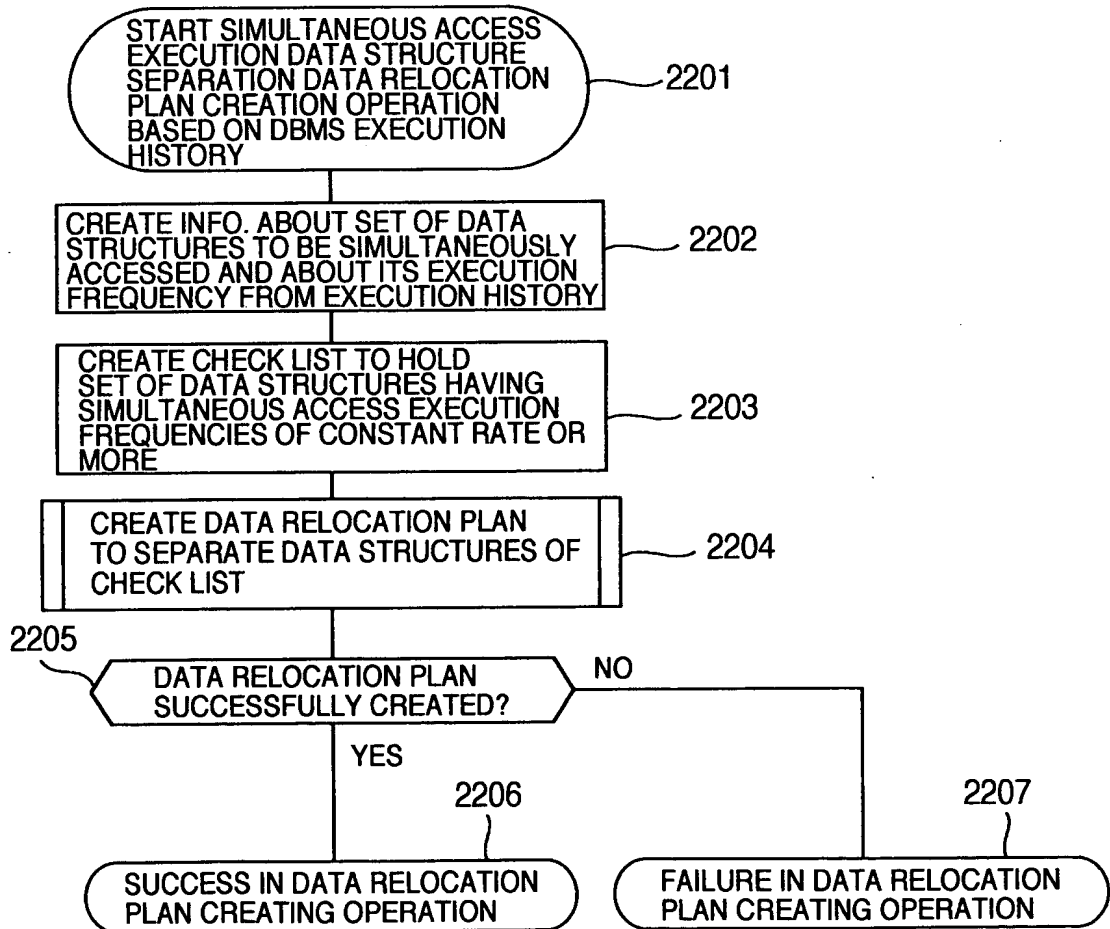


FIG.20

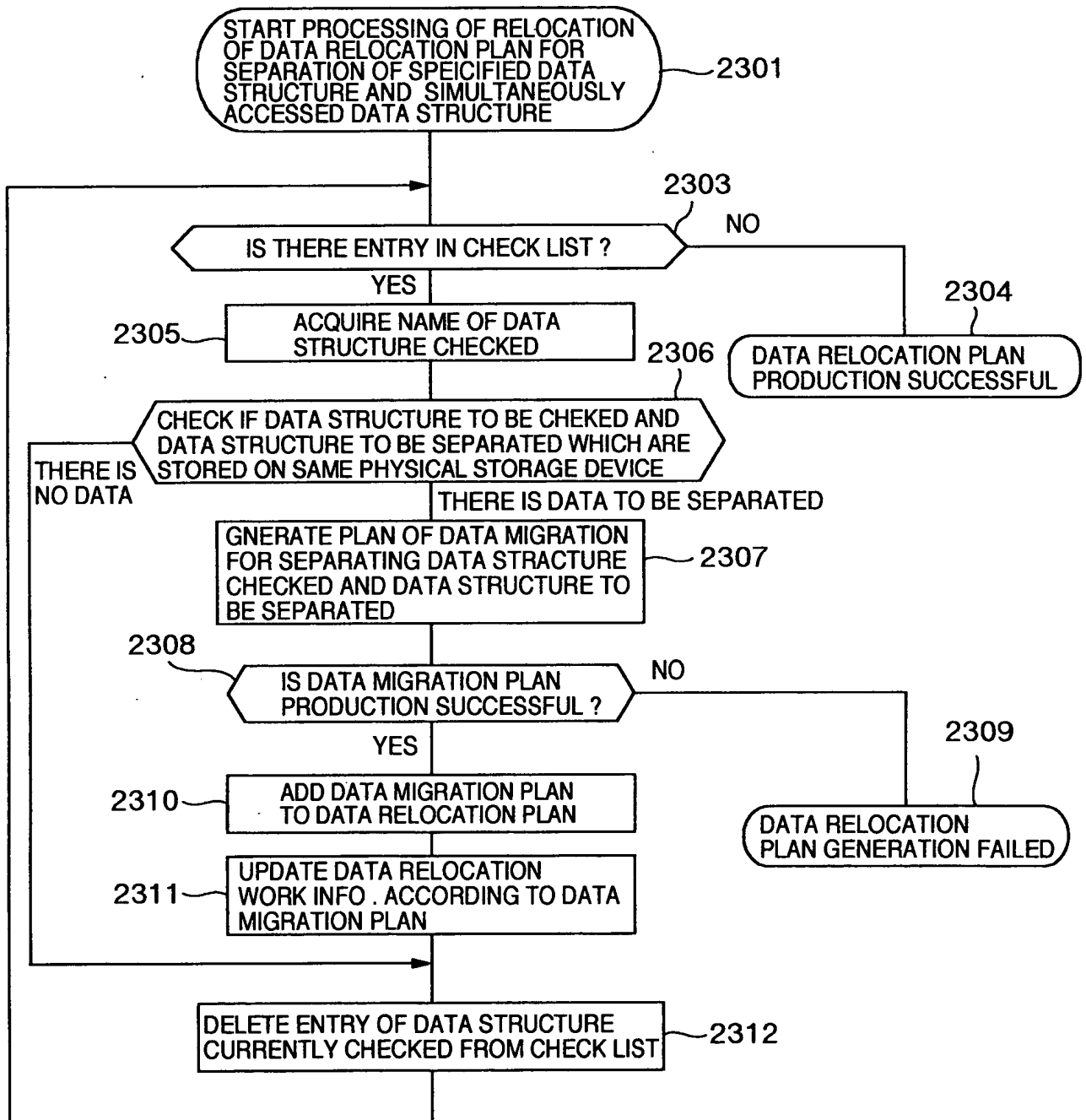


FIG.21

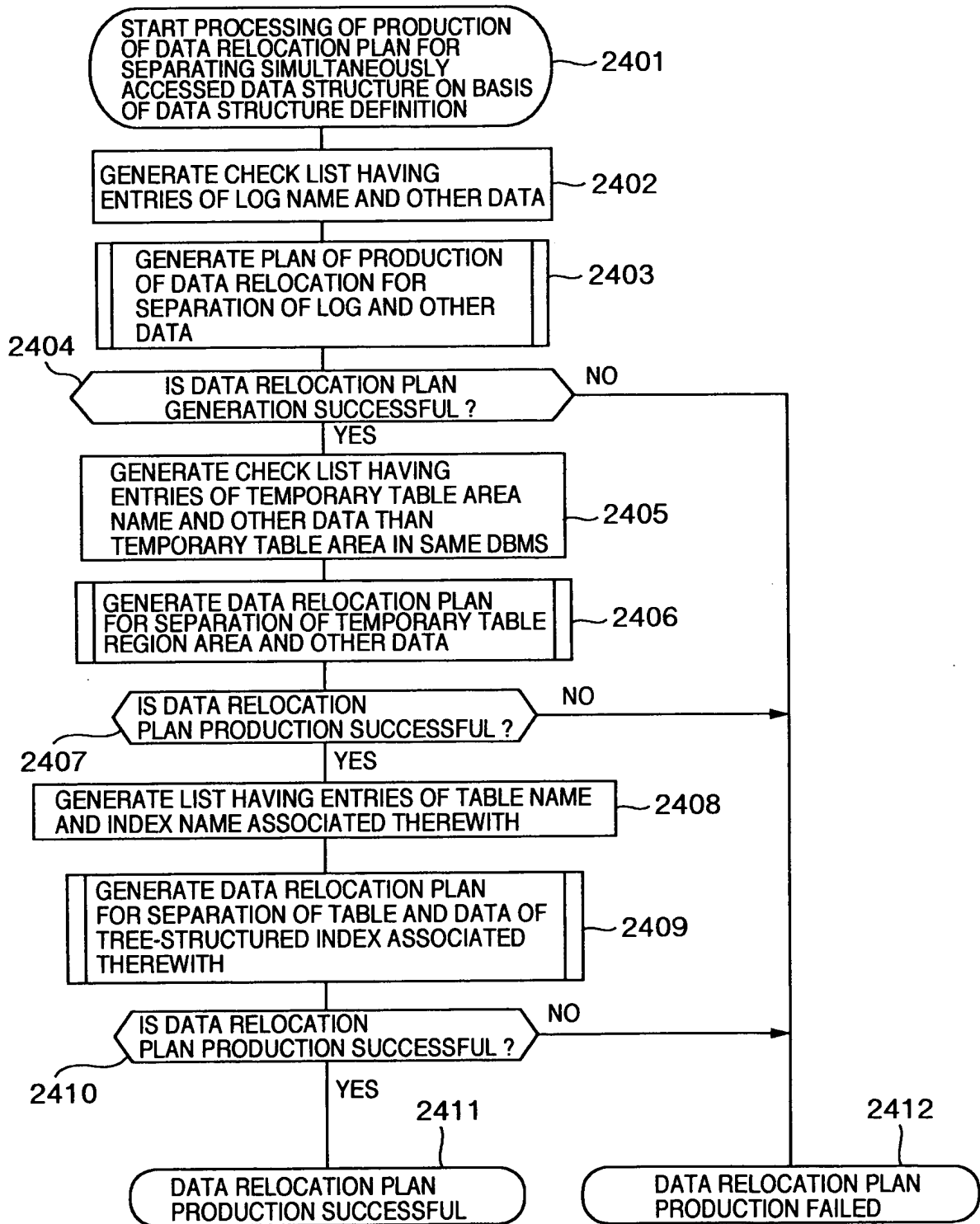


FIG.22

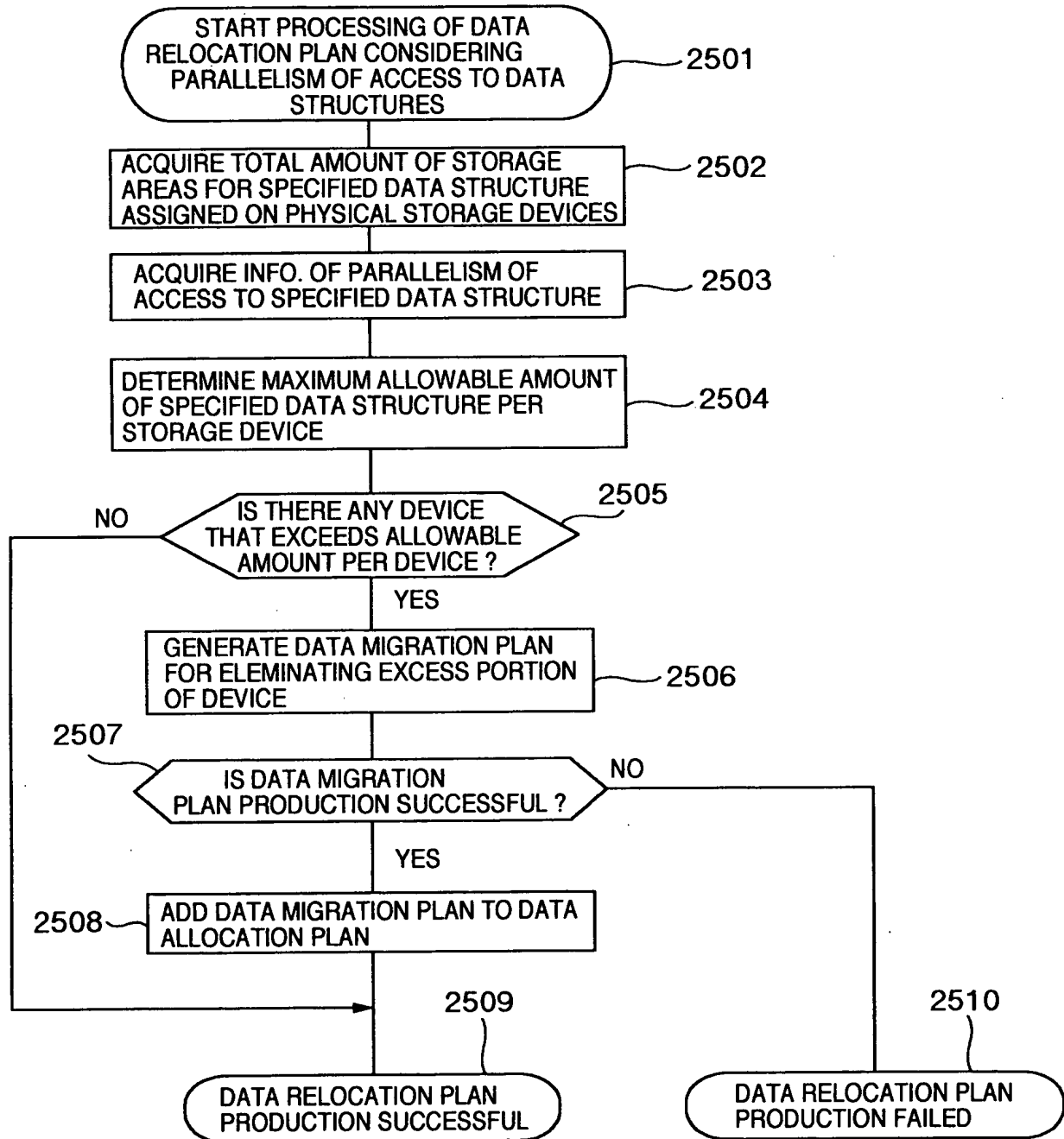


FIG.23

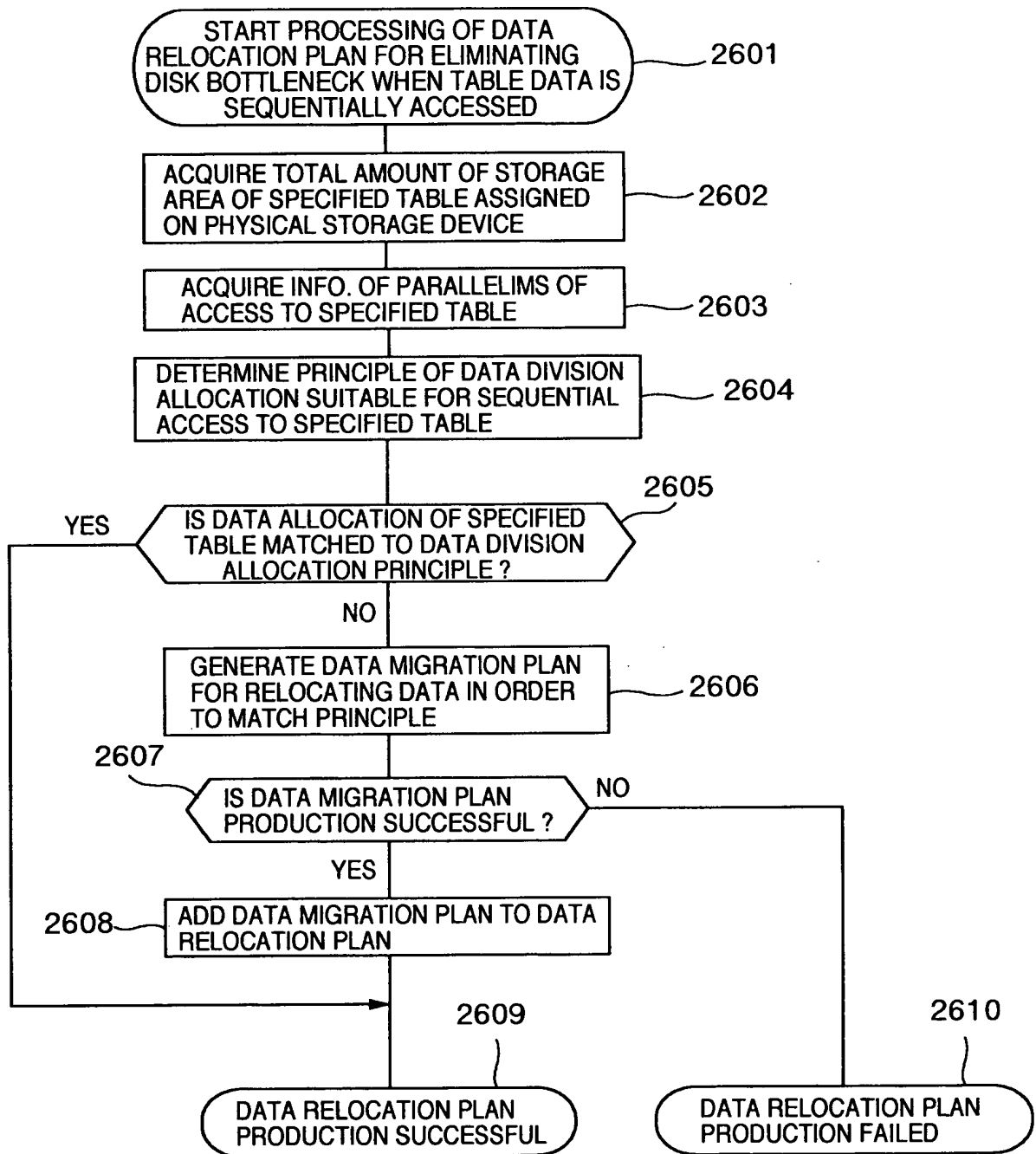


FIG.24

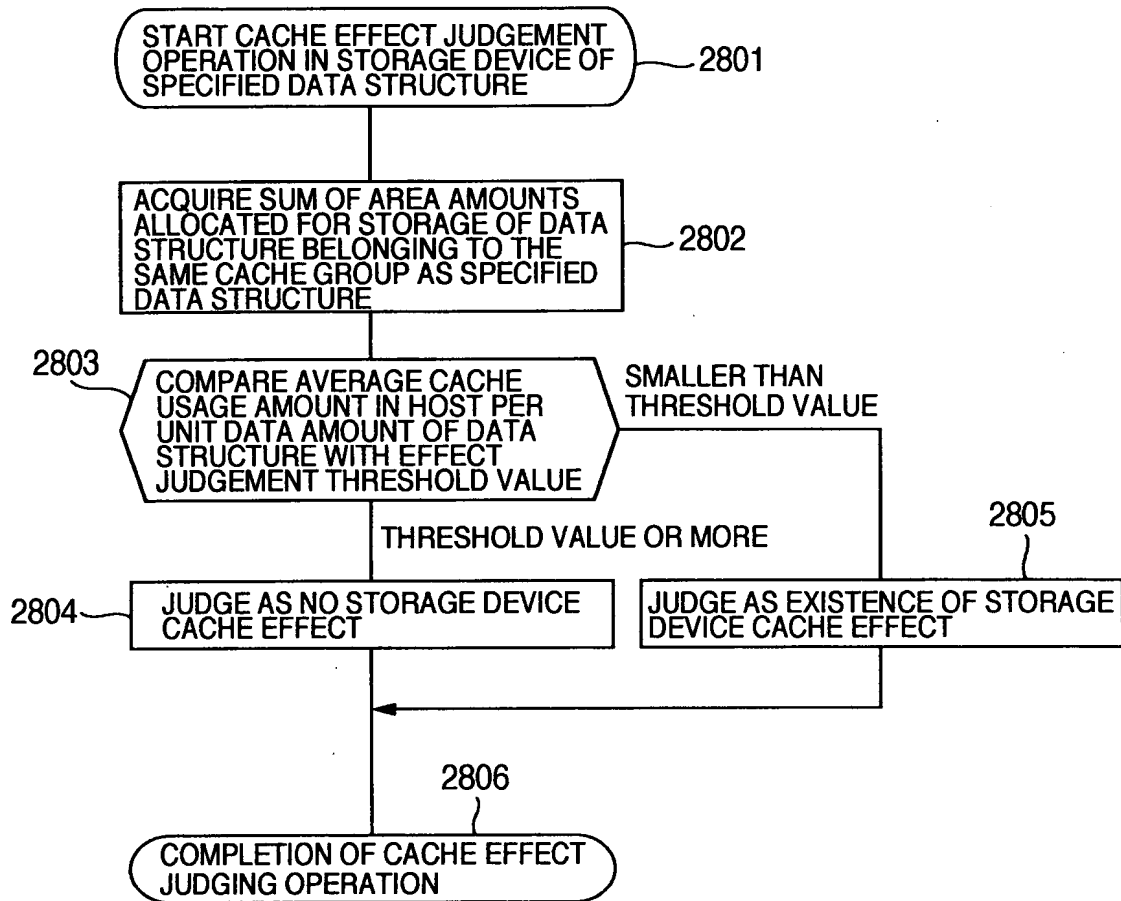


FIG.25

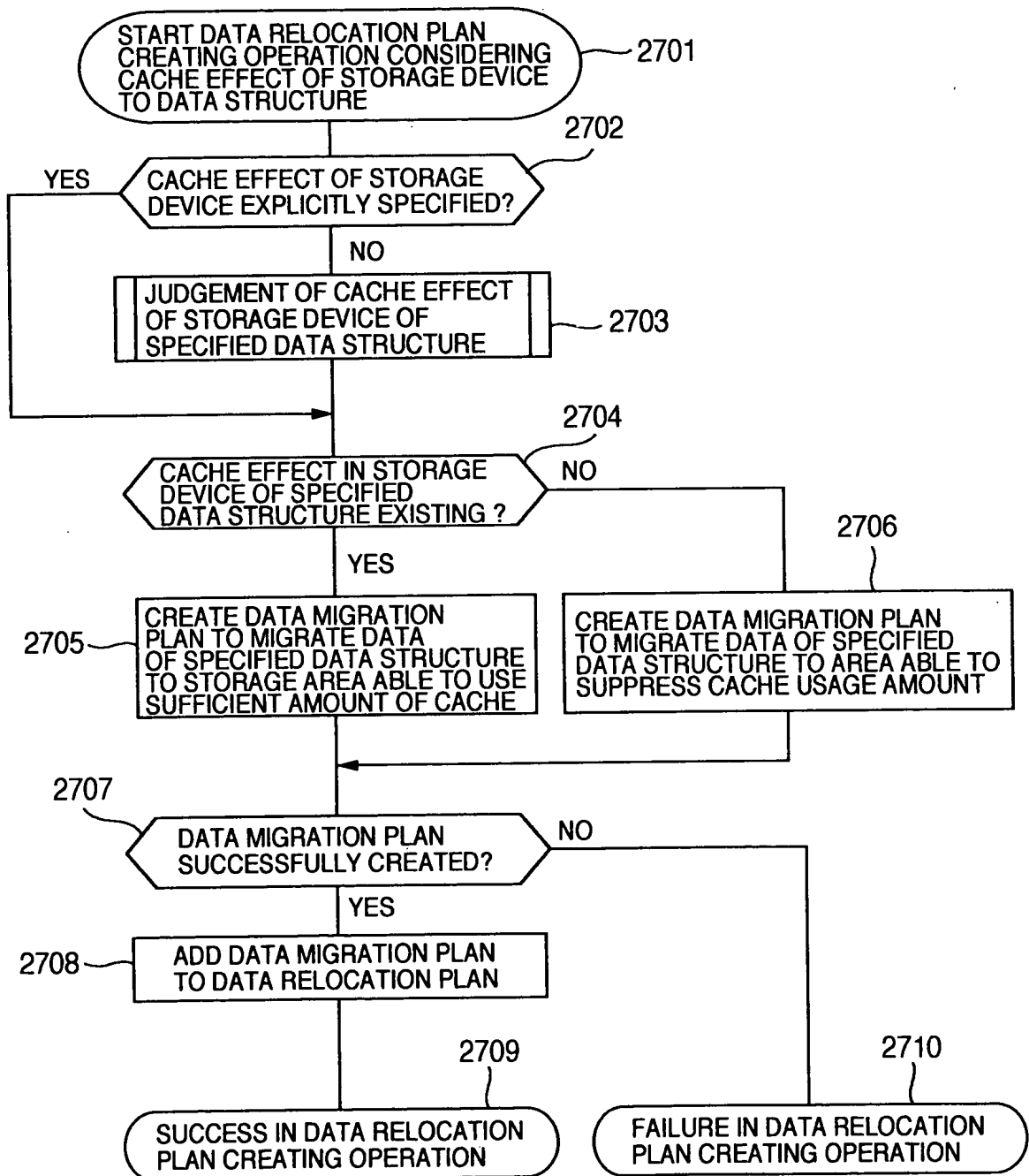


FIG.26

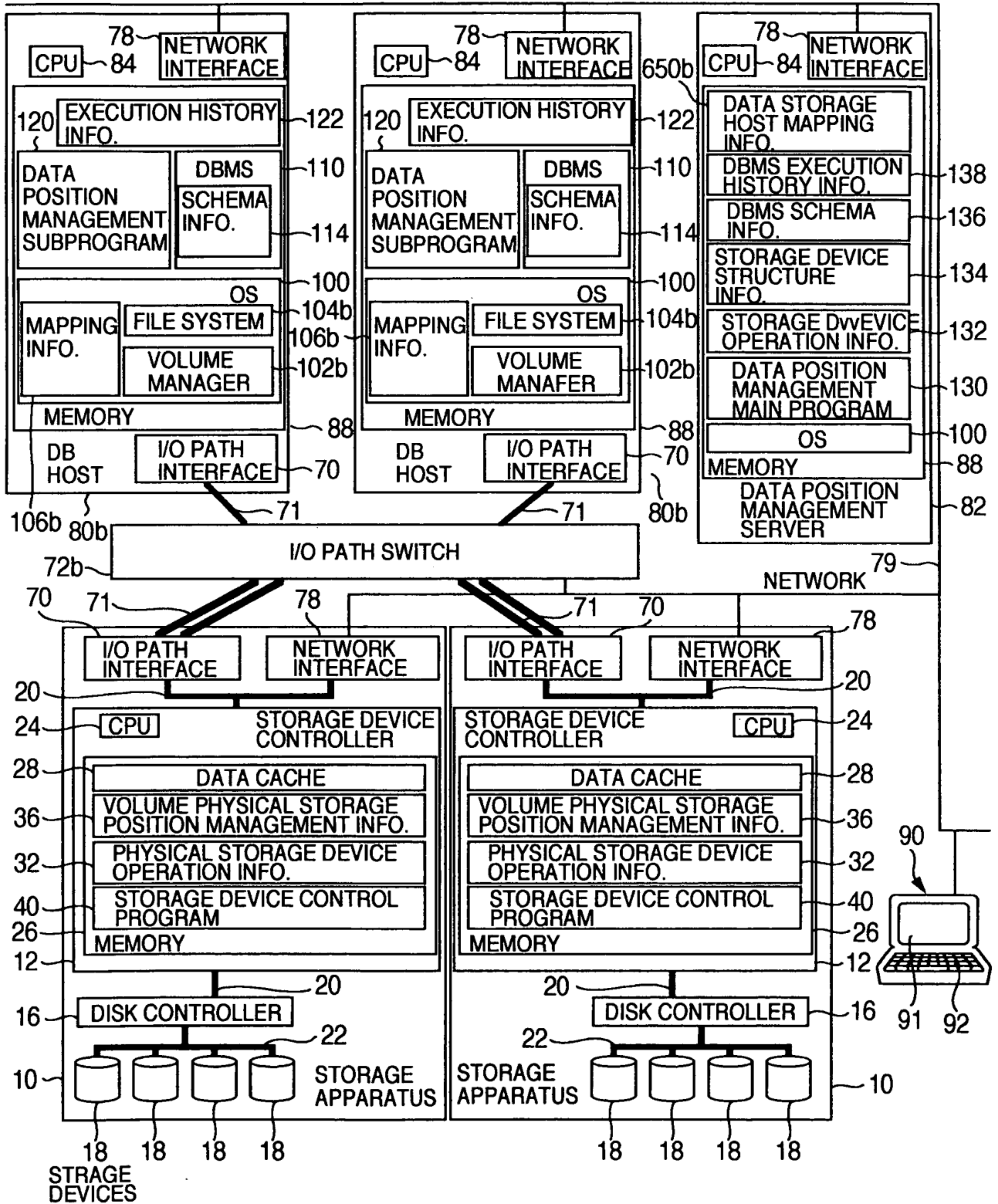


FIG.27

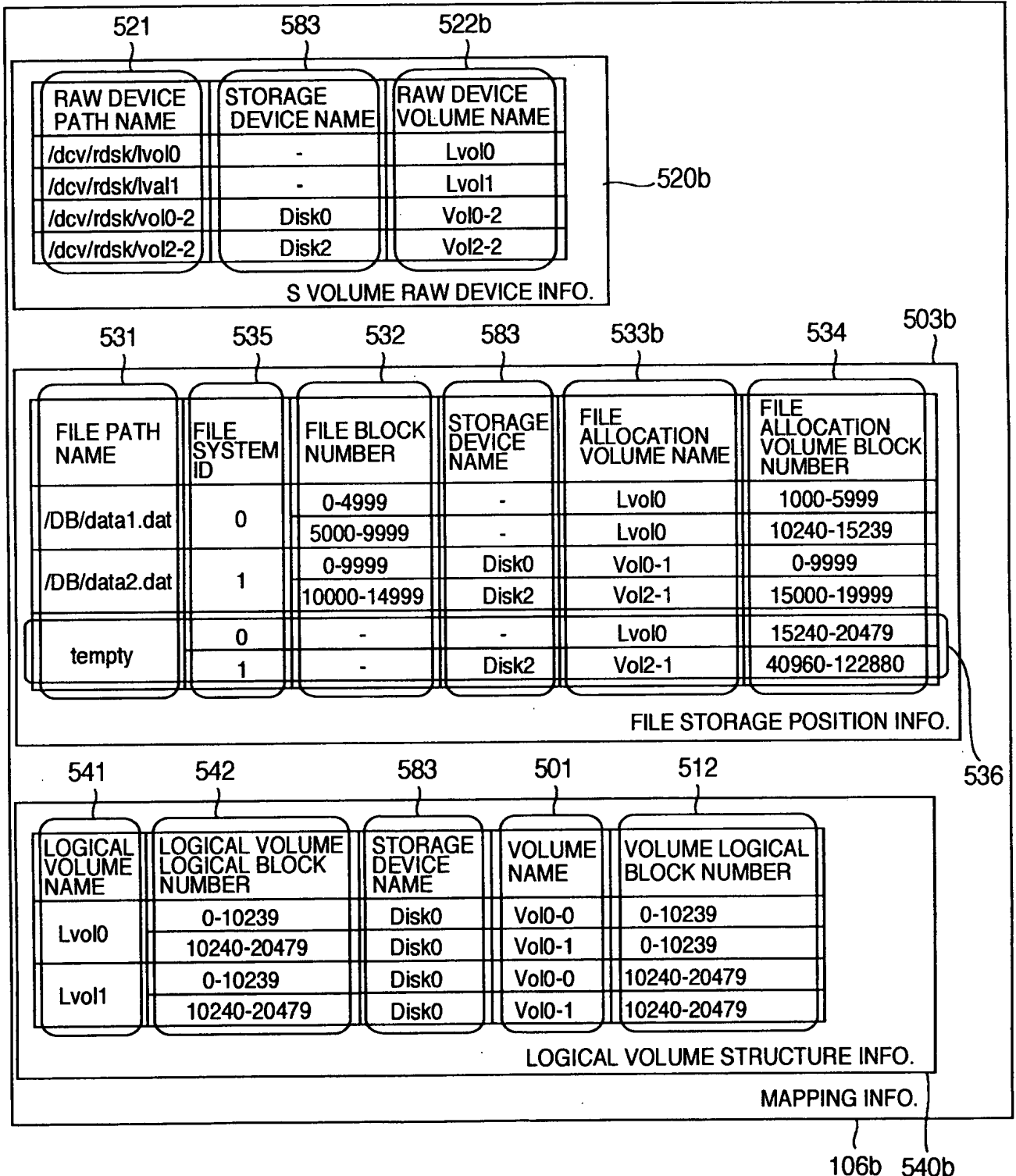


FIG.28

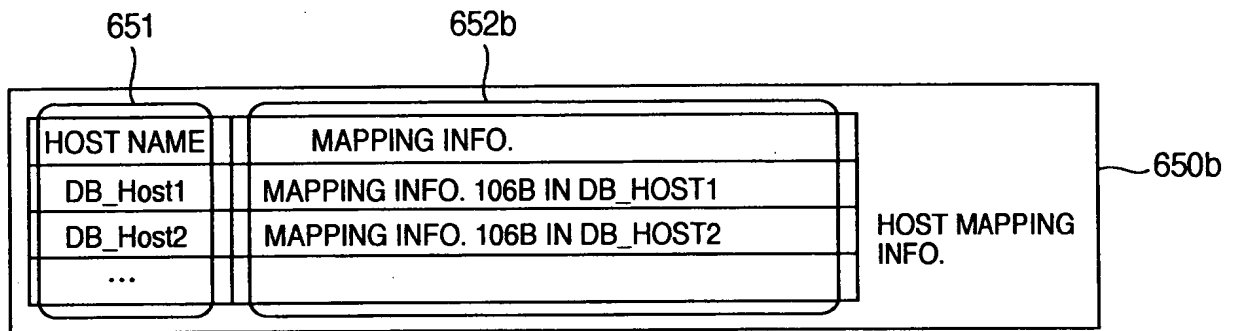


FIG.29

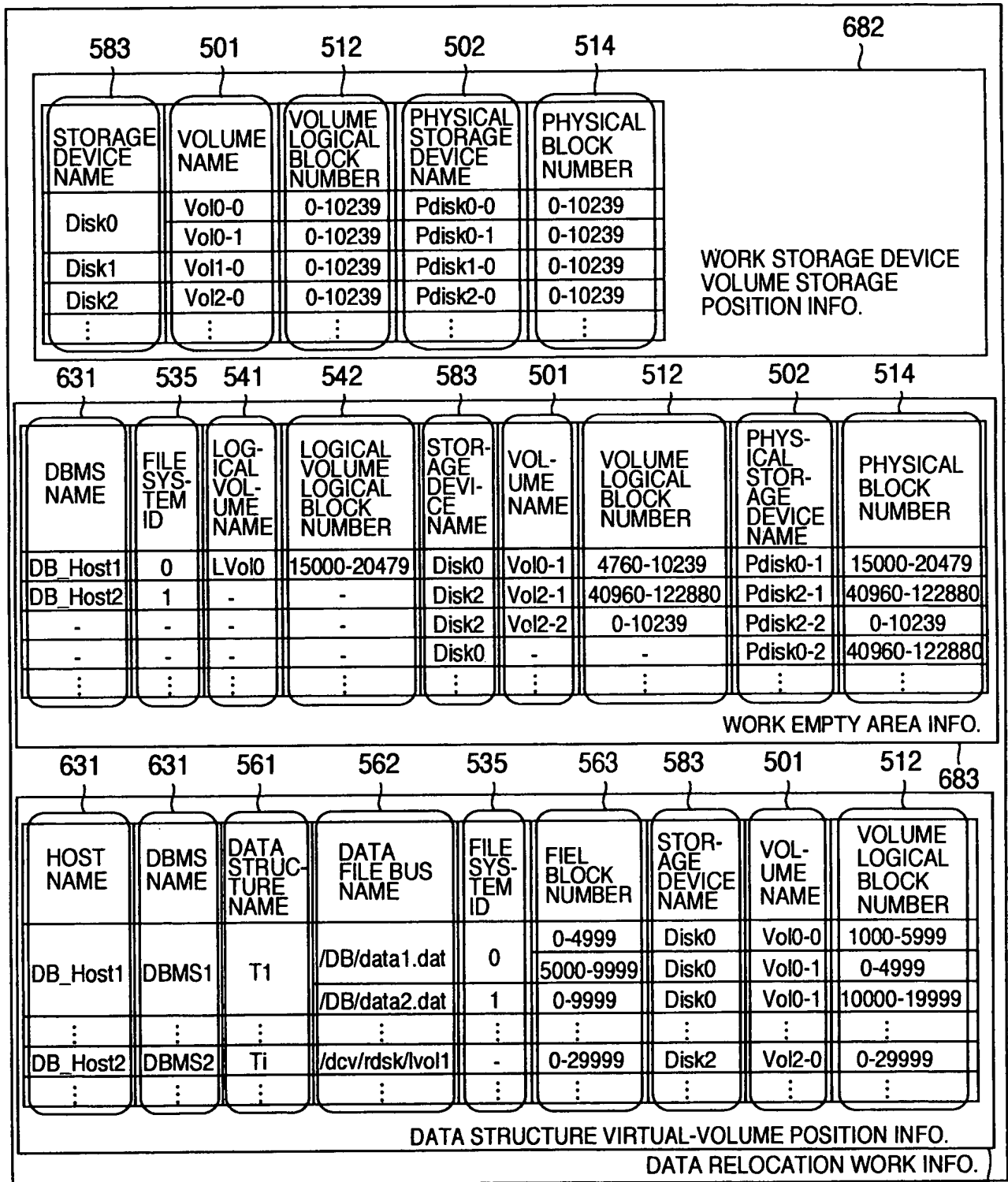


FIG.30

761	631	773	774	764	765	766	753
MIGRA- TION SE- QUENCE	DBMS NAME	MIGRA- TION LOGICAL VOLUME NAME	MIGRATION LOGICAL VOLUME BLOCK NUMBER	MIGRATION DESTINATION STORAGE DEVICE NAME	MIGRATION DESTINATION VOLUME NAME	MIGRATION DESTINATION VOLUME LOGICAL BLOCK NUMBER	
1	DB_Host1	Lvol0	8192-10239	Disk2	Vol2-1	10240-12287	
4	DB_Host2	Lvol2	10240-20479	Disk2	Vol2-1	0-10239	
:	:	:	:	:	:	:	
LOGICAL VOLUME MIGRATION PLAN INFO.							

761	631	535	775	776	764	765	766	754
MIGRA- TION SE- QUENCE	HOST NAME	FILE SYS- TEM ID	MIGRATION DATA FILE PATH NAME	MIGRATION FILE BLOCK NUMBER	MIGRA- TION DESTI- NATION STOR- AGE DEVICE NAME	MIGRA- TION DESTINA- TION VOLUME NAME	MIGRATION DESTINATION VOLUME LOGICAL BLOCK NUMBER	
3	DB_Host1	1	/DB/data2.dat	8192-10239	Disk2	Vol2-1	40960-43007	
5	DB_Host1	0	/DB/data1.dat	1000-5999	-	LVol0	15240-20219	
:	:	:	:	:	:	:	:	
FILE BLOCK MIGRATION PLAN INFO.								

761	767	768	769	771	772	752
MIGRA- TION SE- QUENCE	MIGRA- TION STORAGE DEVICE NAME	MIGRA- TION VOLUME NAME	MIGRATION VOLUME LOGICAL BLOCK NUMBER	MIGRATION DESTINATION PHYSICAL STORAGE DEVICE NAME	MIGRATION DESTINATION PHYSICAL BLOCK NUMBER	
2	Disk2	Vol2-0	8192-10239	Pdisk2-1	8192-10239	
6	Disk2	Vol2-1	0-8192	Pdisk2-1	10240-18431	
:	:	:	:	:	:	
PHYSICAL STORAGE POSITION MIGRATION PLAN INFO.						
MIGRATION PLAN INFO.						

FIG.31

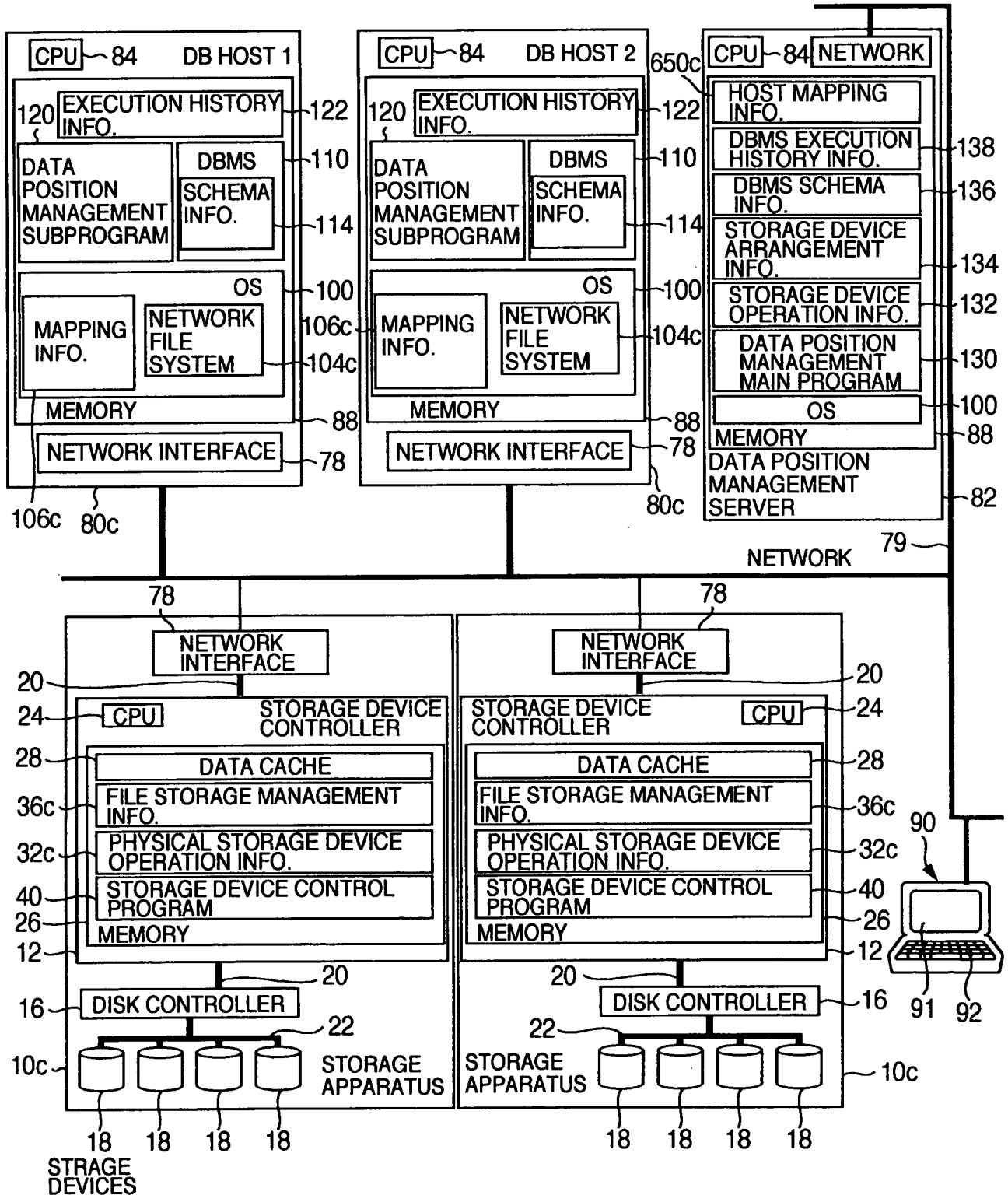


FIG.32

1001 FILE SYSTEM NAME	502 PHYSICAL STORAGE DEVICE NAME	503 CUMULATIVE OPERATION TIME
FS0-0	Pdisk0-0	23917390
	Pdisk0-1	38902849
FS0-1	Pdisk0-0	8290181
	Pdisk0-1	13908202

32c

PHYSICAL STORAGE DEVICE INFO.

FIG.33

1001 FILE SYSTEM NAME	1002 FILE PATH NAME	1003 FILE BLOCK NUMBER	502 PHYSICAL STORAGE DEVICE NAME	514 PHYSICAL BLOCK NUMBER
FS0-0	/control.dat	0-1023	Pdisk0-0	4096-5119
	/VF/VF1.dat	0-2047	Pdisk0-1	1024-3071
	/VF/VF1.dat	2048-4095	Pdisk0-0	8192-10239
	Empty	-	Pdisk0-0	40960-122880
FS0-1	/VF/VF3.dat	0-10239	Pdisk0-1	10240-20479
⋮	⋮	⋮	⋮	⋮

1015

FILE PHYSICAL STORAGE POSITION INFO.

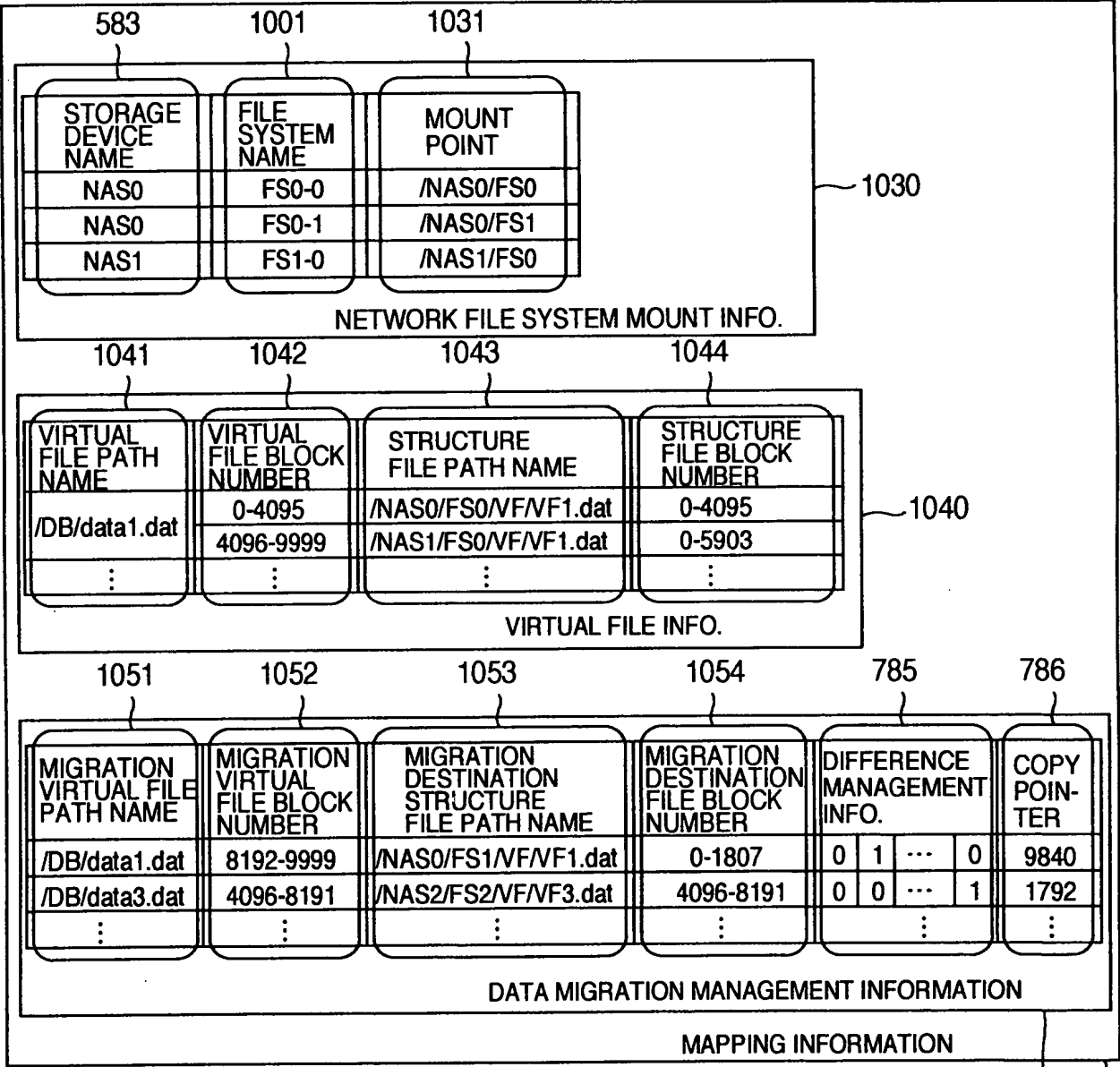
1001 FILE SYSTEM NAME	1002 FILE PATH NAME	1021 MIGRATION FILE BLOCK NUMBER	783 MIGRATION DESTINATION PHYSICAL STORAGE DEVICE NAME	784 MIGRATION DESTINATION PHYSICAL BLOCK NUMBER	785 DIFFERENCE MANAGEMENT INFO.	786 COPY POINTER
FS0-1	/data1.dat	8192-10239	Pdisk0-1	38912-40959	0 1 ... 0	9840
FS0-2	/dataA.dat	0-8191	Pdisk0-1	30720-38911	0 0 ... 1	1709
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FILE DATA MIGRATION MANAGEMENT INFO.

FILE STORAGE MANAGEMENT INFO.

511c 36c

FIG.34



1050 106c

FIG.35

STORAGE DEVICE NAME		Disk0	Disk0	Disk0	...	Disk2	...	583
FILE SYSTEM NAME		Vol0-0	Vol0-0	Vol0-1	...	Vol2-0	...	1001
PHYSICAL STORAGE DEVICE NAME		Pdisk0-0	Pdisk0-1	Pdisk0-0	...	Pdisk2-0	...	502
OLD CUMULATIVE OPERATION TIME		23917390	38902849	8012891	...	128928479	...	593
OPERATION RATE	2000/4/1 12:00~ 2000/4/1 12:15	20%	12%	4%	...	50%	...	594
	2000/4/1 12:15~ 2000/4/1 12:30	15%	10%	7%	...	40%	...	
	2000/4/1 12:30~ 2000/4/1 12:45	16%	9%	5%	...	43%	...	
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
PREVIOUS CUMULATIVE OPERATION TIME ACQUISITION TIME				595	STORAGE DEVICE OPERATION INFO.			132c

FIG.36

583	601	602	604c
STORAGE DEVICE NAME	MIGRATION FUNCTION INFO.	DATA CACHE CAPACITY	STORAGE DEVICE FILE PHYSICAL STORAGE POSITION INFORMATION
NAS0	WITH	4096MB	FILE PHYSICAL STORAGE POSITION INFO. 510C IN NAS0,
NAS1	WITHOUT	4096MB	FILE PHYSICAL STORAGE POSITION INFO. 510C IN NAS1
⋮	⋮	⋮	
STORAGE DEVICE STRUCTURE INFO.			
134c			

FIG.37

651		652c	
HOST NAME		MAPPING INFO.	
DB_Host1		MAPPING INFO. 106C IN DB_HOST1	
DB_Host2		MAPPING INFO. 106C IN DB_HOST2	
⋮		⋮	

650c

HOST MAPPING INFO.

FIG.38

583		1001	1002	1003	502	514	681c	
STORAGE DEVICE NAME		FILE SYSTEM NAME	FILE PATH NAME	FILE BLOCK NUMBER	PHYSICAL STORAGE DEVICE NAME	PHYSICAL BLOCK NUMBER		
NAS0		FS0-0	/control.dat	0-1023	Pdisk0-0	4096-5119		
			/VF/VF1.dat	0-2047	Pdisk0-1	1024-3071		
			/VF/VF1.dat	2048-4095	Pdisk0-0	8192-10239		
			Empty	-	Pdisk0-0	40960-122880	1071	
		FS0-1	/VF/VF3.dat	0-10239	Pdisk0-1	10240-20479		
⋮		⋮	⋮	⋮	⋮	⋮		

STORAGE DEVICE FILE PHYSICAL STORAGE POSITION INFO.

651	631	561	562	563	583	1001	1002	1003	690c
HOST NAME	DBMS NAME	DATA STRUCTURE NAME	DATA FILE PATH NAME	FILE BLOCK NUMBER	STORAGE DEVICE NAME	FILE SYSTEM NAME	FILE PATH NAME	FILE BLOCK NUMBER	
DB_Host1	DBMS1	T1	/DB/data1.dat	0-4095	NAS0	FS0	/VF/VF1.dat	0-4095	
				4096-9999	NAS1	FS0	/VF/VF1.dat	0-5903	
			/DB/data2.dat	0-9999	NAS0	FS1	/VF/VF2.dat	0-9999	
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	

DATA STRUCTURE IN-STORAGE-DEVICE FILE POSITION INFO.

DATA RELOCATION WORK INFO.

670c

FIG.39

